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Document Title

**SITE ENVIRONMENT MANUAL
DARWIN SUPPLY BASE**

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CONTROL STATUS

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Site Environment Manual

1.0 Scope

1.1 Introduction

This Site Environment Manual (SEM) is written specifically for the OEG Offshore Pty Ltd (OEG) Supply Base located at Lot number 5106 (30) Hamaura Road, East Arm, Darwin in the Northern Territory.

The SEM has been established in accordance with the requirements for legislative and regulatory compliance in the Northern Territory and will further serve as a repository for information relating to all Environmental Aspects, Hazards, Risks and Control Measures applicable to the scope of works.

1.2 Scope of Works

The supply base provides fabrication services, mechanical repairs, periodic testing of offshore and ISO tanks, cleaning and preparation of OEG and customer owned heli-fuel tanks, chemical storage, handling and blending for oil, gas and mining chemical supply companies and processing of hydrocarbons to produce, store and/or despatch methanol.

LOT 5106 Hamaura Road - Services provided to the site include:

- Fabrication and machining and mechanical repairs (inclusive of welding) to OEG owned and customer owned equipment.
- 1500sqm bunded storage area to store chemicals, decanting of heli-tank residue and repackaging residues for waste collection.
- IBC, tank and tanker wash facility.
- Offshore container fleet maintenance and storage.
- 2 in house NATA accredited inspectors qualified to perform annual certified visual inspections on offshore containers and tanks. One of the inspectors NATA accredited to perform tank cleanliness and 2.5 / 5.0 yearly periodic tank inspections-certification.
- Offshore containers and tanks. One of the inspectors NATA accredited to perform tank cleanliness.
- And 2.5 / 5.0 yearly periodic tank inspections-certification.

OEG recognises that the range of supply base operations have the potential to cause environmental impacts and that all environmental impacts must be identified and managed appropriately.

This Site Environment Manual (SEM) has been developed to identify and document potential environment related risks and develop appropriate mitigation measures and procedures to ensure that the environmental objectives of OEG and the relevant statutory requirements are addressed.

1.3 Existing Environment

The land surrounding the supply base is primarily used for industrial purposes including:

- Hamaura Road (primary road access point) with the Darwin Harbour nearby to the south.
- Directly surrounding port related industries.
- Vopak terminal to the west.
- Passenger rail system to the north.

A variety of products are produced at the supply base including:

- general waste (food and plastic).

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- recyclable waste (metal, paper, cardboard).
- hazardous waste (oil, fuel, cleaning chemicals, dangerous substances).
- wastewater sludge (waste solids from water treatment plant); and
- biohazard waste (contains or potentially contains pest species).

1.4 Site Environment Manual (SEM) Scope

The SEM provides the management and performance requirements related to the waste at the supply base and includes:

- requirements for the management of waste for operations at the supply base as stipulated by regulatory approvals for the site.
- responsibilities for implementing the SEM.
- description of potential sources of wastes and risks related to waste management.
- description of environmental controls and associated limits to meet objectives and regulatory approval requirements; and
- overview of the environmental monitoring programs associated with environmental controls and management actions.

1.5 Normative References

1.5.1 Terms and Definitions

| | |
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| Auditor | Person with the competence to conduct an audit. |
| Accreditation | A process of giving formal recognition of competence. |
| Can | Indicates a possibility or a capability. |
| Check | A visual and functional assessment of equipment. |
| Corrective action | Action to eliminate the cause of a detected nonconformity. |
| Environment | Surroundings in which an organization operates, including air, water, land, |
| Environment Aspect | Elements of an organisation's activities or products or services that can interact with the environment. |
| Environment Impact | Any change to the organisation, whether adverse or beneficial, wholly or partially resulting from an organisation's environmental aspects. |
| Environment Management System (EMS) | Part of an organization's management system used to develop and implement its environmental policy and manage its environmental aspects |
| Environment Policy | Overall intentions and direction of an organization related to its environmental performance as formally expressed by top management |
| Internal Audit | Systematic, independent and documented process for obtaining audit evidence and evaluating it objectively to determine the extent to which the environmental management system audit criteria set by the organization are fulfilled |
| Non-Conformity | Non-fulfilment of a requirement |
| Preventative Action | Action to eliminate the cause of a potential nonconformity |

1.5.2 Acronyms and Abbreviations

| | |
|------|--------------------------------------|
| AMSA | Australian Maritime Safety Authority |
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| APPEA | Australian Petroleum Production & Exploration Association |
| OEG | OEG Offshore Pty Ltd |

2.0 Environment Management

2.1 General Requirements

OEG Offshore Pty Ltd (OEG) is committed to taking practicable steps to minimise the detrimental effects of its activities on the environment and recognises that achieving a high standard of environmental performance requires organisational commitment and a systematic approach.

OEG is committed to:

- Undertaking operations in accordance with the Environmental Policy.
- Pay due recognition to relevant environmental codes, standards and prescribed regulations.
- Develop and implement environmental management procedures including objectives and targets.
- Monitor the Environmental Management System for compliance and improvement.
- Exercise reasonable care to avoid hazards and environmental problems.

2.2 Environment Policy

OEG Offshore Pty Ltd (OEG) recognises its responsibility to respect the environment and will strive to achieve environmental best practice throughout its business activity, wherever practicable.

We believe that everyone has a duty of care for the environment and to seek ways to conserve natural resources. We are conscious of environmental issues and we believe that the pursuit of economic growth can be linked to ecological protection. This is a collective issue, which is the responsibility of government, business and the community at large.

All employees, sub-suppliers and contractors are responsible for the implementation of, and compliance with this policy to meet the above requirements OEG will:

- Monitor the performance of its sub-suppliers and sub-contractors to ensure that the goods and services they provide meet the OEG Environment objectives.
- Provide the support and resources necessary to ensure operations comply with applicable environmental laws and regulations.
- Continuously improve the company's environmental performance by implementing environmental management procedures, reviewing their effectiveness and rectifying deficiencies where necessary.
- Review environmental aspects and impacts of OEG operations prior to undertaking the work and implement appropriate procedures to manage potential risks.
- Implement internal recycling programs and encourage process modifications that reduce pollution and waste.
- Initiate remedial action to improve performance, rectify damage and prevent incidents reoccurring and report and record environmental incidents and non-compliance situations.
- Establish mechanisms for employees to report concerns about environmental issues and respond promptly to their concerns.
- Develop employee and contractor awareness of their environmental obligations through education, induction and training.
- Set and review targets and objectives to continuously improve our environmental performance.

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This statement will be communicated to all relevant personnel and made available to interested parties when requested. The statement is reviewed on an annual basis and may be added to or modified from time to time and may be supplemented in appropriate cases by further statements relating to the work of particular sites or installations.

PATRICK HANNA
General Manager
(OEGAU-E-POL-001)

2.3 Planning

Environmental management planning is applicable to all activities undertaken at the Darwin Supply Base and shall include:

- Review of work to be undertaken.
- Identification and assessment of the environmental aspects (hazards) and impacts (risks) associated with the work.
- Implementation of control measures to eliminate or minimize the risks associated with any significant environmental impacts, including compliance with Client and/or regulatory requirements.
- Identification and assignment of competent personnel to perform the work.
- Monitoring of the environmental control measures put in place for effectiveness.

2.4 Aspects

Environmental aspects and impacts are defined in the Australian/New Zealand Standard AS/NZS ISO 14001 2004 as:

- Environmental Aspects: “element of an organisation’s activities or products or services that can interact with the environment”; and
- Environmental Impacts: “any change to the environment, whether adverse or beneficial, wholly or partially resulting from an organisation’s environmental aspects”.

Environment Aspects are assessed using the Environmental Aspect Assessment Form. Once completed the results are entered into the Aspects and Impacts Register.

See Environment Aspects and Impacts Register for OEG environmental aspects and related impacts.

2.5 Legal and Other

OEG are aware of and understand the legislative environmental obligations specific to their operations and the importance of complying with the relevant legislation.

A list of legislation potentially relevant to OEG operations is listed in the OEG Legal Register. To accomplish this, OEG have documented the Legal Requirements Procedure. The procedure outlines how OEG establish, implement and maintain legal compliance which identifies conditions of regulatory approvals as well as generally applicable Environmental Acts and their subsidiary legislation.

This manual ensures that environment management at the supply base is undertaken in accordance with:

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2.5.1 Legislative and Approval Requirements

Commonwealth:

- National Environment Protection Council Act 1994
- National Environmental Protection (Movement of Controlled Waste between States and Territories) Measure 1998

Northern Territory:

- Environmental Protection Authority Act 2017
- Waste Management and Pollution Control Act 2016
- Water Act 2016
- Waste Management and Pollution Control Regulations 2014

Local:

NT WorkSafe - Schedule 11 Hazardous Chemicals exceeding manifest quantities in accordance with Regulation 348 of the Work Health and Safety (National Uniform Legislation) Regulations.

2.6 Approval and Licencing Conditions

| Approval | Section | Condition | Reference |
|---|-------------------|--|--|
| NT WorkSafe Schedule 11 Work Health and Safety (National Uniform Legislation) Act and Work Health and Safety (National Uniform Legislation) Regulations | Regulation 347 | Manifest - A PCBU at a workplace where the quantity of a Schedule 11 hazardous chemicals exceeds the manifest quantity are used stored or handled must: <ul style="list-style-type: none"> • Prepare a manifest of hazardous chemicals, and • Amend the manifest as soon as reasonably practicable if: <ul style="list-style-type: none"> • The type or quantity of hazardous chemical that must be listed in the manifest changes, or • There is a significant change in the information required to be recorded in the manifest. • A manifest of Schedule 11 hazardous chemicals must comply with Schedule 12 of the WHS (NUL) Regulations. • The manifest must be kept in a place determined in agreement with the primary emergency service organisation and be available for inspection under the WHS Act and be readily accessible to the | OEGAU-S-FO-043 Chemical Register- Darwin |

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| | | emergency services organisation. | |
| <p>NT WorkSafe Schedule 11</p> <p>Work Health and Safety (National Uniform Legislation) Act and Work Health and Safety (National Uniform Legislation) Regulations</p> | <p>Regulation 348(2) and 348 (4)</p> | <p>Hazardous Chemicals - Notification to the Regulator is required:</p> <ul style="list-style-type: none"> • Immediately after it is known that the Schedule 11 hazardous chemical or Schedule 11 group of hazardous chemicals is to be first used, handled or stored or at least 14 days before that first use, handling or storage (whichever is earlier), and • Immediately after it is known that there will be a significant change in the risk of using, handling or storing the Schedule 11 hazardous chemical or group of Schedule 11 hazardous chemicals at the workplace or at least 14 days before that change (whichever is the earlier), and • As soon as practicable after the Schedule 11 hazardous chemical or group of Schedule 11 hazardous chemicals is no longer used, stored or handled or it is not likely to be used, handled or stored at the workplace in the future. | |
| <p>NT WorkSafe Schedule 11</p> <p>Work Health and Safety (National Uniform Legislation) Act and Work Health and Safety (National Uniform Legislation) Regulations</p> | <p>Regulation 367(2), 367 (3) and 367 (4)</p> | <p>Abandonment of Tank - Notification to the Regulator is required as soon as practicable after the tank is abandoned Regulation 367(3)</p> <p>The tank is taken to be abandoned if:</p> <ul style="list-style-type: none"> • The tank has not been used to store flammable gases or flammable liquids for 2 years, or • The person does not intend to use the tank to store flammable gases or flammable liquids again. <p>Regulation 367(2) Tank means a container, other than an intermediate bulk</p> | |

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| | | container (IBC) designed to use, handle or store hazardous chemicals in bulk, and include fittings, closures and other equipment attached to the container – Regulation 367(4). | |
| Waste Management and Pollution Control Act – Schedule 2 | Section 30 | Part 1 – Activities that require EPA approval Carrying out works in relation to the premises for the storage, recycling, treatment or disposal of listed wastes on a commercial or fee-for-service basis. Carrying out works in relations to the premises for the storage processing of hydrocarbons so as to produce, store and/or dispatch liquefied natural gas or methanol | EPL - Waste |
| Waste Management and Pollution Control (Administration) Regulations – Schedule 2 (Listed waste) | Regulation 2A | Acidic solutions Containers that are contaminated with residues of a listed waste Residue from industrial waste treatment or disposal operations Sewerage sludge and septic tank sludge Waste mixtures and waste emulsions of oil and water or hydrocarbon and water | |

The SEM falls under the broader company Health, Safety, Security and Environment Manual for the supply base.

2.7 Environment Objectives and Targets

Environmental objectives and targets are defined in the Australian/New Zealand Standard AS/NZS ISO 14001: 2004 as:

- Environmental Objective: “Overall goal, consistent with the environmental policy, that an organisation aims to achieve”
- Environmental Target: “Detailed performance requirement, applicable to the organisation or parts thereof, that arises from the environmental objectives and that needs to be set and met in order to achieve those objectives”

The OEG Environment Objectives and Targets address the significant Environmental Aspects and any environmental requirements identified by the National QHSE Manager, Management Team with consultation with OEG’s employees.

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The Objectives and Targets also reflect OEG’s Environmental Policy goals, significant environmental aspects, technology options, commercial requirements, legal requirements and views of interested parties.

Targets must be set with achievable deadlines - specific dates for achievement of the targets. This ensures environmental objectives are met in accordance with the organisation's environmental policy leading to continual improvement in environmental management.

Responsibility for the achievement of each target and associated actions must be assigned to ensure they are achieved as planned

The Environment Objectives and Targets of this manual are to:

- Advise OEG employees and its contactors of their responsibilities toward environment management on the site.
- Ensure compliance related to regulatory and legislative requirements.
- Ensure the surrounding local environment is not impacted by OEG operations.

| | Objective | Target | | Process | Relevant Documentation |
|---|---|---|---------------------------------------|--|---|
| | | Indicator | Target | | |
| 1 | Ensuring work is performed in accordance with this Site Environment Manual. The Environmental Management System and statutory requirements. | Close out of actions from incident investigations, inspections, observations, audits and inspections Actual vs. Scheduled | 100% within agreed timeframes | Internal and external site audits, Corrective Action Tracking, PD weekly environmental inspection, incident reporting and observations. | OEGAU-Q-PROCD-013 Non-Conformance, Corrective and Preventative Action Procedure OEGAU-Q-FO-123 NCR Register. |
| 2 | Pollution prevention and environmental impact reduction | Reporting of Environment incidents to the EPA immediately & the National QHSE Manager. Recording in Incident Register. | Immediate reporting Zero Incidents | Spill Kits, Providing Spill response, DG/Hazardous Material Handling Environmental awareness, emergency response training, Conduct Reporting training e.g. Induction | OEGAU-S-PROCD-022 Emergency Preparedness and Response Procedure-Darwin Commonwealth National Environment Protection Council Act 1994 National Environmental Protection (Movement of Controlled Waste between States and Territories) Measure 1998 |

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| | | | | | Northern Territory Environmental Protection Authority Act 2017 Waste Management and Pollution Control Act 2016 Water Act 2016 Waste Management and Pollution Control Regulations 2014 |
| 3 | Mitigate potential environmental risks. Impacts are identified and provisions are made for their prevention and management | Environment Risk Register is current. Weekly Site Inspections | Updated when additional risks identified with JHA/PTW/ Hazardous Substance Risk Assessments 100% | Conducting formal Risk Management. Implementation of JHA/PTW and Environmental Risk Register | OEGAU-E-FO-006 Environment Risk Register Environmental Protection Act 1986 (Cwth) ISO 31000 Risk Management 2018 |
| 4 | Ensuring Personnel are aware of and able to achieve their environmental targets through appropriate training and awareness programs. | Inductions and training completed Environmental awareness topics delivered to personnel in toolbox sessions. | As per training requirement targets 100% Conducting environmental toolbox as | Training requirements are identified and risk are communicated via induction, Toolbox, Pre-start and QHSE notice boards | OEGAU-Q-FO-071 Training Matrix MASTER OEGAU-Q-PROCD-002 Control of Personnel Procedure |
| 5 | Maintain and improve SEP and procedures in order to meet and demonstrate the environmental objectives are met. | Inspections and audits completed Actual vs. Scheduled: Monthly QHSE meetings | 100% | Internal and external audits, SEP review by management | OEGAU-S-FO-005 Site Inspection Checklist OEGAU-E-FO-007 Environment Audit Form |
| 6 | Compliance with environmental legislation, guidelines and policies | Legal Register: Compliance with all applicable environmental legislative | 100% CAR >90% close out within specified | Annual Management Review | OEGAU-E-FO-002 Legal Register OEGAU-Q-PROCD-013 Non-Conformance, |

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| | | requirements Non-compliance identified during performance monitoring | time frame. | | Corrective and Preventative Action Procedure OEGAU-Q-FO-063 NCR Register OEGAU-Q-PROCD-014 Management Review Procedure |
| 7 | Keep the Facility/Base clean and free from any potential environmental hazards | Environmental Inspections, actual vs. scheduled | 100% | Weekly Site Inspections | OEGAU-S-FO-005 Site Inspection Checklist |
| 8 | Mitigating potential hazardous risk | Risk Assessment Inspections actual vs. scheduled | 100% | Materials Storage and Handling training. Updated MSDS, Inventory and incident reporting Employees Trained in the implementation of Chemicals and HAZMAT Process | Commonwealth: National Environment Protection Council Act 1994 National Environmental Protection (Movement of Controlled Waste between States and Territories) Measure 1998 Northern Territory Environmental Protection Authority Act 2017 Waste Management and Pollution Control Act 2016 Water Act 2016 Waste Management and Pollution Control Regulations 2014 |
| 9 | Achievement of best practice environmental management | Audit results Inspection results | 100% | Adhere to this Site Environment Manual | This SEM OEGAU-Q-FO-072 Audit and |

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| | | | | | Inspection Schedule OEGAU-E-FO-007 Environment Audit Form |
| 10 | Ensure environmental controls are implemented and continuous improvement processes are in place. | Audit schedule; developed and in operation | Inspections and audits completed Actual vs. Scheduled 100% | Audits to be conducted at a minimum every 12 months. Documented Inspections conducted by Supervisor on a weekly basis. | This SEM OEGAU-Q-FO-072 Audit and Inspection Schedule OEGAU-E-FO-007 Environment Audit Form |
| 11 | Ensure the water quality in the region is maintained and that surface water released to the municipal drain that feeds into Darwin Harbour is not contaminated with hazardous substances. | Samples of water sent to laboratory for testing | 12 monthly water monitoring of 4 sites | Monthly monitoring | Water Monitoring Plan / Sampling Analysis Quality Plan (SAQP) – CDM Smith |

2.8 Conceptual Site Model

| Potential Source | | Potential Pathway | | Potential Exposure Route | | Potential Receptor |
|---|---|--|---|---|---|------------------------------------|
| Bund to ISO Tank (Yard 1) Methanol/Ethanol | | If bund fails in Yard 1 to groundwater via the municipal drain (connected to Darwin Harbour) | | Toxicity to Fish Ingestion of fish by humans | | Fish and aquatic ecosystems/Humans |
| Bund to Chemical Storage (Yard 1) Hydrocarbons | → | If bund fails in Yard 1 to groundwater via the municipal drain (connected to Darwin Harbour) | → | Toxicity to Fish Ingestion of fish by humans | → | Fish and aquatic ecosystems |
| Bund to Tank Wash Bay (Yard 2) | | If bund fails in Yard 1 to groundwater via the municipal | | Toxicity to Fish | | Fish and aquatic ecosystems |

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| | | drain (connected to Darwin Harbour) | | Ingestion of fish by humans | | |
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3.0 Implementation and Operation

The range of environment mitigation controls outlined in this manual are applied to the supply base operation by OEG.

3.1 Resources, Roles, Responsibilities and Authority

Responsibility, accountability and commensurate authority for the overall effectiveness of the Environmental Management System has been assigned to management functions, as described below. The incumbents of these positions have the independence, capability and authority to exercise the necessary responsibility.

General Manager

The General Manager is responsible for:

- Responsible for the direction of the development and implementation of the company Environmental Management System.
- Responsible for providing the necessary resources and infrastructure to implement, maintain and improve the Environmental Management System.
- Responsible for ensuring commitment and accountability of functional staff towards the environment.
- Responsible for reviewing the effectiveness of the Environmental Management System.

QHSE Manager

Within OEG operations, the QHSE Manager shall report both the environmental performance and any recommendations for additional improvement directly to their respective General Manager and have the organisational freedom to take all necessary action to ensure that the environmental management system requirements are established, implemented and maintained.

- Responsible to assist in the development and implementation of the EMS.
- Review and improve the EMS.
- Co-ordinate environmental awareness amongst staff.
- Facilitate continual improvement.
- Resolve instances of non-conformance.
- Perform surveillance and audits.
- Review and approval of environmental documentation.
- Report to management on environmental issues and direction, including:
 - Results of internal audits and evaluations of compliance with legal requirements and with other requirements to which the organization subscribes.
 - Communication(s) from external interested parties, including complaints.
 - The environmental performance of the organization.
 - The extent to which objectives and targets have been met.
 - Status of corrective and preventive actions.
 - Changing circumstances, including developments in legal and other requirements related to its environmental aspects, and
 - Any recommendations for improvement.

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Managers

- Responsible for implementing environmental management systems.
- Responsible for ensuring the requirements of Governments and Statutory Authorities are reflected in the divisional environmental management systems.
- Responsible for ensuring that all levels of staff receive adequate training.
- Responsible for the provision of adequate resources.
- Reporting Environmental Incidents.
- Responsible for implementing specific environmental plans.
- Ensuring and partaking in regular reviews of the environmental management policy and/or specific elements of the EMS.
- Providing a regular report to management and ensure that findings and recommendations are responded to and implemented as necessary.
- Ensuring non-conformities are reported.
- Ensuring non-conformities are corrected within the required time frame and that disposition/remedial solutions are effectively implemented.
- Ensuring subcontractors fulfil their environmental obligations.
- Attending meetings called to discuss environmental issues.

Workshop Supervisor/Hire Coordinator

- Responsible for implementing environmental management systems.
- Performing monthly site surveillance inspections.
- Reporting Environmental Incidents.
- Ensuring non-conformities are reported.
- Ensuring non-conformities are corrected within the required time frame and that disposition/remedial solutions are effectively implemented.
- Ensuring subcontractors fulfil their environmental obligations.
- Attending meetings called to discuss environmental issues.

Employees

All employees of OEG have the responsibility to perform their duties consistent with the requirements of the Environmental Management System and report areas for improvement.

3.2 Competence, Training and Awareness

Personnel performing tasks that could cause significant environmental impacts shall be competent and have the necessary skills and experience to perform the tasks.

Company inductions are performed for all new OEG personnel and include an overview of the OEG environmental policy and procedures.

Topics covered include, but are not limited to, the following:

- The Environmental Policy and Objectives.
- The potential effects of the operations on the environment.
- The environmental regulatory framework in which OEG operates.
- The structure and use of the Environmental Management System.
- The duties and responsibilities of all personnel.
- The procedures used for reporting and investigating environmental incidents.
- Spill Management Training Presentation.

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- Chemical Management and Hazardous Substance Training Presentation.
- Emergency Evacuation and Emergency Drills.

Induction is completed prior to the new worker or contractor undertaking work activity at the supply base. Initial training is further reinforced through regular toolbox talks and prestart meetings.

3.3 Communication

Key Contacts for the SEM are as follows:

| Issue of Concern | Responsible Agency | Contact Number | Website/Email |
|--|---|--|--|
| Police, Fire & Emergency Services | Local Government | 132 500 Emergency Helpline 08 8999 3473 Fire Assistance | http://www.pfes.nt.gov.au/ https://twitter.com/ntpolice |
| NT Integrated Land Information Services (ILIS) | Department of Infrastructure, Planning and Logistics (DIPL) | (08) 8995 5322. | ilis.support@nt.gov.au |
| Handling and storage of dangerous goods | NT WorkSafe | 1800 019 115 | http://www.worksafe.nt.gov.au/Pages/default.aspx |
| Sewerage | Power and Water | 1800 245 090 | https://www.powerwater.com.au |
| Spills/Waste Management | NT EPA | (08) 8924 4218 or pollution hotline 1800 064 567 | ntepa@nt.gov.au |
| ALS Laboratories | Water Monitoring | +61 8 8942 2608 | ALS locations (alsglobal.com) |

3.4 Environment Management System Framework

Key Environment Management System includes:

- Environment Policy
- Health, Safety, Security and Environment Manual
- Impact and Aspects Register
- Legal Register
- Environmental Aspects Assessment Form
- Environment Risk Register
- Waste Register
- Environment Audit Form
- Chemical Manifest
- MSDS Register
- Site Inspections

3.5 Operational Control

The following aspects shall be controlled as and when they impact on the environment:

- Waste Management
- Air Emission to Atmosphere
- Water Usage and Discharge to Waterways

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- Release to Land – Contamination by Spills
- Storage and Management of Materials - Hazardous Materials
- Use of Energy – Water/Energy Consumption
- Landscaping and Infrastructure

3.6 Emergency Preparedness and Response

An Emergency Preparedness and Response Procedure has been developed for the Darwin Supply Base. The procedure includes:

- Emergency Evacuation Plan
- Emergency Drills
- Contingency Plans
- Incident Reporting

3.7 Environment Aspects and Impacts

An Environmental impact (or risk) is the likelihood/probability that environmental pollution might result because of the aspect. By assessing risks, the Manager/Supervisor can identify priorities for the implementation of risk control options. This process is defined as follows:

1. Identify and record process/activity to be assessed.
2. Carry out environmental aspect assessment.
3. Identify environment aspects:
 - Air emissions to atmosphere
 - Water usage and discharge to surface water, ground water and sewers
 - Land contamination caused by spillages
 - Production, re-use, recycling and disposal of controlled and special wastes
 - Storage and management of materials
 - Local ecology surrounding the location of supply bases
 - Environment noise
 - Community
 - Energy Use and management
 - Raw materials or resources
 - Landscaping and infrastructure
 - Waste generation or local land contamination
4. Record Environment Impact
5. Identify and record control or influence
6. Identify and record Legal Register References
7. Record Area/Location
8. Record Owner/Responsibility
9. Assess Risks for Likelihood/Severity
10. Record Risk Rating Score
11. Reference Documents/Procedures
12. Enter Form Reference
13. Enter Form Storage location
14. Measuring and Monitoring Requirements
15. Improvement Target
16. Record assessment on OEGAU-E-FO-003 Environment Aspect Assessment form and determine review requirements.
17. Record in OEGAU-E-FO-001 Environment Aspect Register.
18. Communicate Environmental Aspect Assessment.

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19. Implement controls and check effectiveness.
20. The aspect is reviewed where opportunities for improvement are identified and recorded with Environmental objectives set.

3.9 Aspects and Impacts Risk Rating

| | |
|------------------|---|
| NORMAL | A NUMBER GREATER THAN 10 IS CONSIDERED SIGNIFICANT |
| ABNORMAL | A NUMBER GREATER THAN 15 IS CONSIDERED SIGNIFICANT |
| EMERGENCY | A NUMBER GREATER THAN 20 IS CONSIDERED SIGNIFICANT |

| LIKELIHOOD | LEGISLATION & OTHER REQUIREMENTS | POLLUTION | RESOURCE USE | PUBLIC IMAGE | BUSINESS INTERRUPTION |
|----------------------|---|---|---------------------------------|----------------------------------|--|
| 1 – VERY LOW | <10% LIKELIHOOD OF BREACH OF LEGISLATION OR OTHER REQUIREMENTS | NOT CREDIBLE - NO KNOWLEDGE OF PREVIOUS OCCURRENCE IN PROCESS. | NO OR INFREQUENT USE OF PROCESS | <10% IMPACT ON PUBLIC IMAGE | NO EFFECT ON BUSINESS. NOT CONCEIVABLE |
| 2 - MEDIUM | >10% <50% LIKELIHOOD OF BREACH OF LEGISLATION OR OTHER REQUIREMENTS | CONCEIVABLE BUT WOULD REQUIRE MULTIPLE FAILURES OF SYSTEMS AND CONTROLS | AVERAGE USE FOR PROCESS | >10% <50% IMPACT ON PUBLIC IMAGE | POSSIBLE LOW LOSS OF BUSINESS OR PRODUCTION CAN BE QUICKLY RECOVERED |
| 3 - HIGH | 50% <90% LIKELIHOOD OF BREACH OF LEGISLATION OR OTHER REQUIREMENTS | REQUIRES FAILURE OF ONE SYSTEM OR CONTROL FOR MAJOR POLLUTION | FREQUENT USE OF PROCESS | >50% <90% IMPACT ON PUBLIC IMAGE | HIGHLY PROBABLE LOSS OF BUSINESS |
| 4 – VERY HIGH | >90% LIKELIHOOD OF BREACH OF LEGISLATION OR OTHER REQUIREMENTS | CERTAIN ENVIRONMENTAL POLLUTION – NO CONTROL | CONSTANT USE OF PROCESS | >90% IMPACT ON PUBLIC IMAGE | CERTAIN LOSS OF BUSINESS CONTINUITY |

| SEVERITY | LEGISLATION & OTHER REQUIREMENTS | POLLUTION | RESOURCE USE | PUBLIC IMAGE | BUSINESS INTERRUPTION |
|----------------------|---|--|---|---|--|
| 1 – VERY LOW | NO STATUTORY LEGAL OR OTHER REQUIREMENTS | NO POLLUTION OCCURRING RECYCLING | VERY LOW OR NO USE OF NON RENEWABLE RESOURCES | NO PUBLIC IMAGE CONCERNS | NO LOSS OF BUSINESS |
| 2 - MEDIUM | NON -CONFORMANCE OF INTERNAL CONTROL AND POSSIBLE CUSTOMER IMPLICATIONS | MINOR LOCALIZED POLLUTION TO ACSC MINOR LONG TERM WASTE ISSUE | MEDIUM USE OF NON-RENEWABLE RESOURCES | INTERNAL OR SHORT TERM IMAGE CONCERN (NEIGHBOURS) | SHORT TERM LOSS OF BUSINESS |
| 3- HIGH | BREACH OF LEGISLATION RESULTING IN REGULATORY BODY ACTIONS | MAJOR LOCALIZED POLLUTION TO ACSC AND MINOR POLLUTION TO EXTERNAL ENVIRONMENT I.E CLEAN UP LARGE LONG TERM WASTE ISSUE | HIGH USE OF NON-RENEWABLE RESOURCES | MEDIUM TERM IMAGE CONCERNS (LOCAL MEDIA) | MEDIUM TERM LOSS OF BUSINESS |
| 4 – VERY HIGH | BREACH OF LEGISLATION PROSECUTION, LARGE FINES | LONG TERM POLLUTION OF EXTERNAL ENVIRONMENT | VERY HIGH USE OF NON-RENEWABLE RESOURCES | LONG TERM PUBLIC IMAGE (NATIONAL MEDIA) | LONG TERM LOSS OF BUSINESS AND CUSTOMERS |

4.0 Tank Wash Bay

Tank Washing of offshore containers and tanks is undertaken in Yard 1 (Lot 5106 Hamaura Rd) in the Tank Wash Bay.

Tank washing consists of two parts:

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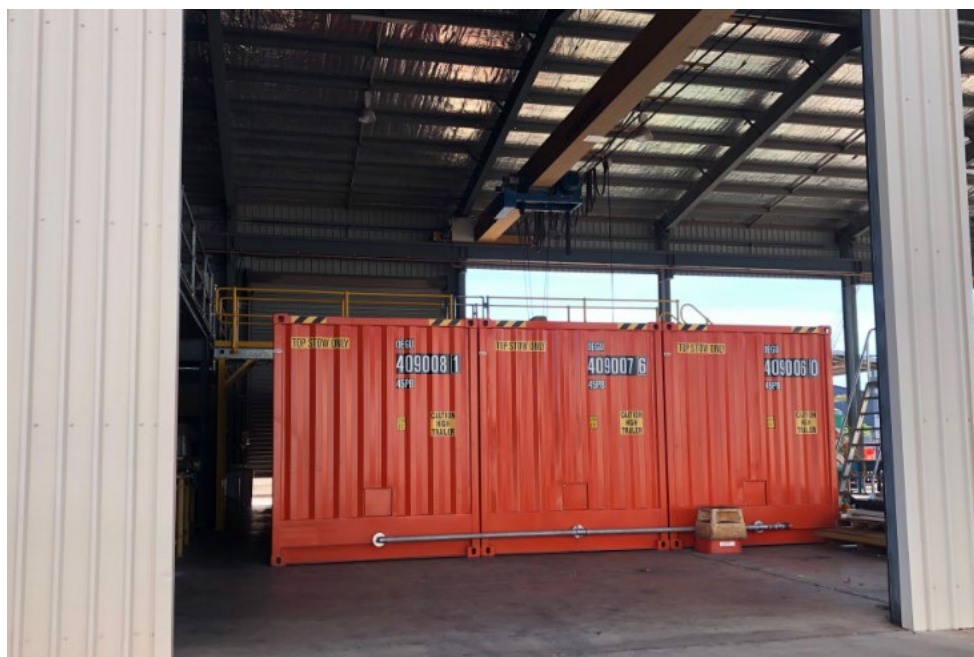
1. Exterior wash performed with high-pressure cleaners with wash water captured by a bund that drains to IBC's that are collected by (VTG/Veolia/Cleanaway) for disposal.
2. Interior wash using high-pressure cleaners with wash water generated pumped directly from the tank and stored in IBC's that are collected by (VTG/Veolia/Cleanaway) for disposal offsite.

The tank wash bay measures 7500mm x 3500mm (26.25m²) in size and consists of two cast iron grates (600mm x 600mm) that connect via 150mm HDPE that feeds into a separator pit (total bund volume 1000lt) connected to a Humeceptor Oil/Water Separator that connects to a 300mm stainless steel knife-valve that connects directly into the municipal drain (connected to Darwin Harbour). The knife-valve between the Humeceptor and municipal drain is permanently isolated to ensure no contaminated waste leaves the site into the municipal drain.

All water from the wash bay feeds into a below ground pit that has a pump fitted to automatically pump water into above ground 2 4000lt above ground tanks. There is a valve fitted to manually select which tank the water is pumped into.

All IBCs that store liquid waste are stored on steel containment pallets.





5.0 Waste Management

To support the reduction in greenhouse gases OEG have a policy of 'waste minimisation' in both the office and work site.

The impact of waste disposal resulting from company activity shall be reduced to levels that are as Low as Reasonably Practicable (ALARP) through robust and effective management and monitoring practices.

To ensure that this philosophy is applied, waste management control measures should be developed where appropriate to ensure that site facilities/offices include the following:

- Facilities to manage scrap materials (e.g. scrap bins)
- Manage surplus materials (e.g. consignment or buyback)
- Facilities for the separation of wastes (e.g. mini skips/bins)
- Facilities to promote re-cycling (e.g. Paperchase/Visy)
- Facilities to manage 'prescribed waste' (e.g. subcontract)
- Training and awareness for personnel exposed to specified wastes
- PPE for personnel exposed to specified wastes (e.g. chemical gloves)
- Information regarding waste material properties (e.g. MSDSs)

4.1 Minimising Waste Product

Waste generation shall be minimised or treated to reduce the impact to ALARP by considering the following waste control hierarchy:

Avoid – change how we do business so that waste is not generated.

Reduce – choose less hazardous chemicals and reduce amount of natural resources (water/energy) to undertake operational activities.

Recycle - recycle water used to undertake chemical blending.

Treat – mitigate the hazard of the waste by detoxification/neutralisation.

Dispose – remove the waste from site via external waste contractors

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4.2 Waste Streams

A variety of waste streams are generated at the supply base including:

| Waste Category | Brief Description | Location | Quantities per Annum | | |
|-------------------|-----------------------------------|----------|----------------------|----|---|
| | | | Tonne | M3 | L |
| Acid Water | Residue generated by tank washing | Yard 1 | | | |
| Coolant | Residue generated by tank washing | Yard 1 | | | |
| Drilling Mud | Residue generated by tank washing | Yard 1 | | | |
| Glycol | Residue generated by tank washing | Yard 1 | | | |
| Hydrocarbons | Residue generated by tank washing | Yard 1 | | | |
| JET Aviation Fuel | Residue generated by tank washing | Yard 1 | | | |
| Methanol | Residue generated by tank washing | Yard 1 | | | |
| Oily Filters | 205L Drum – Oily Filters | Yard 1 | | | |
| Oily Rags | Rags used to clean machinery | Yard 1 | | | |
| Oily Water | Residue generated by tank washing | Yard 1 | | | |
| Septic Waste | Residue generated by tank washing | Yard 1 | | | |
| Sludge | Residue generated by tank washing | Yard 1 | | | |
| Solid Waste | General Waste | Yard 1 | | | |
| Wash Water | Residue generated by tank washing | Yard 1 | | | |
| Waste Oil | 205L Drum Waste Oil | Yard 1 | | | |

The following identified waste streams are segregated:

- General Waste
- Hazardous Waste (oily rags/filters/hazardous chemical containers)
- Ink Toner Cartridges

4.3 Waste Hierarchy

OEG will endeavour to manage waste as outlined in the Waste Avoidance and Resource Recovery Act 2001. The waste hierarchy control is outlined in Figure 1 below:

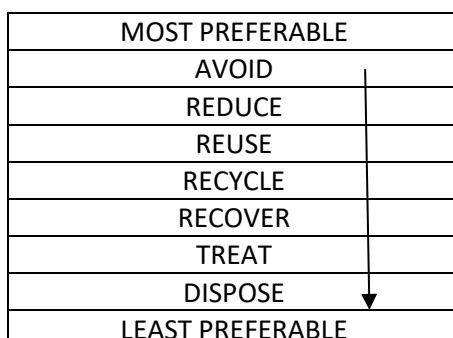


Figure 1 – Waste Hierarchy of Control

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Before waste is removed from site it is accessed by the waste contractor for suitability for the intended destination. OEG can facilitate this step by sorting waste into one of seven waste categories outlined in Table 2 Waste Classification.

4.4 Waste Monitoring

Waste monitoring is undertaken at a corporate level by means of monthly waste reporting that is reviewed annually at the Management Review as a means of confirming the effectiveness of the waste control measures.

4.5 Water Monitoring

Methanol bulk tank bund water monitoring is undertaken to meet condition 9 of EPL257-01. A sample of the bund water will be sent to ALS Laboratories for testing to validate that the level of detection for methanol in the bund water tested, is below the level of reporting (1 mg/L) before release to storm water.

Water testing frequency will be determined by the amount of rainfall (more frequent in the wet season) that is captured in the bund.

In the event that the level of detection for methanol exceeds 1 mg/L, the water will be deemed hazardous waste and collected by a licenced waste contractor (VTG/Veolia/Cleanaway)) for disposal.

4.6 Management of Waste Streams

It is a legislative requirement that waste generated and/or stored on this supply base is assessed and classified into one of the seven categories outlined in the table below. Waste collected from the site is disposed of by licenced contractors to an appropriate licenced waste facility.

4.7 Waste Classification and Management

| | Waste Category | Sources | Management | Treatment |
|---|--|--|--|--|
| 1 | General solid waste (putrescible) | Food scraps, wrappers etc from Personnel | <ul style="list-style-type: none"> Separate food waste bins provided in break areas/offices. Wastes are collected for storage in separate skip bins. Skip bins are not overfilled and are kept closed so as not to attract birds and control odour. | Offsite disposal by licenced contractor to an appropriately licenced waste facility. |
| 2 | General solid waste (non-putrescible, nonrecyclable) | Administration/ Workshop/Yard 1 | <ul style="list-style-type: none"> Separate bins are provided in offices, break areas, workshops and external site areas. Wastes are collected for storage in separate skip bins. Skip bins are not overfilled and are kept closed so as not to | Offsite disposal by licenced contractor at an appropriately licenced facility |
| 3 | General solid waste (recyclable) | | | Offsite disposal by licensed waste contractor ((VTG/Veolia/Cleanaway)) |

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| | | | | |
|---|-----------------|---|--|--|
| | | | <p>attract birds and control odour.</p> <ul style="list-style-type: none"> • Empty oil drums, scrap metal, used • parts/components and machinery are managed as necessary. • Wastes identified for recycling are stored separate to other wastes. | |
| 4 | Liquid waste | Workshop (Oily Water) | <ul style="list-style-type: none"> • All cleaning of the equipment is carried out with high-pressure hoses and collected into IBC's. • Excess wash water is captured in the bund with excess oily sludge vacuumed into IBC. | Offsite disposal by licensed waste contractor ((VTG/Veolia/Cleanaway)) |
| | | ISO Tank Bund Water | <ul style="list-style-type: none"> • Bund water will be sent to ALS for testing prior to release. If reading for methanol exceeds 1 mg/L the water will be collected for disposal by licenced waste contractor. | Offsite disposal by licenced waste contractor ((VTG/Veolia/Cleanaway)) |
| | | Tank Washing | <ul style="list-style-type: none"> • Liquid wastes collected from devices disposed of according to proper classification. • Tank washing wastewater is collected in the bund in Yard 2 and collected by a vacuum truck. | Offsite disposal by licensed waste contractor ((VTG/Veolia/Cleanaway)) |
| 5 | Hazardous Waste | Workshop/ Spills/ Oily Water/Acid Water | <ul style="list-style-type: none"> • Waste oils and fluids, including materials used to clean up spills, are collected and stored in appropriate containers in a covered and bunded area behind the workshop. • Spill kits placed in hazardous waste locations for use and clean-up materials disposed as hazardous waste. | Offsite disposal by licensed waste contractor ((VTG/Veolia/Cleanaway)) |

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| | | | | |
|---|-----------------|---|---|--|
| 6 | Biohazard Waste | Tank wash water from treated sewerage tanks | <ul style="list-style-type: none"> Collected and pumped into IBC's | Offsite disposal by licensed waste contractor ((VTG/Veolia/Cleanaway)) |
|---|-----------------|---|---|--|

Table 2 Waste Classification

4.8 Waste Water

The volume of water entering the storm water drain has been reduced through the drainage design and construction of a roof over the tank washing facility. The drainage system at the supply base is designed to separate the phase of the wash into three waste streams:

- Waste oil is collected in the separator and drawn using pumps into IBC's and disposed as liquid waste by a licensed waste contractor.
- Waste sludge is collected as required and vacuumed out using pumps into IBC's and disposed as liquid waste by a licensed waste contractor; and
- Wastewater discharged to storm water is free of all hazardous substances.

4.9 Waste Storage Areas

Designated waste storage areas are as follows:

Yard 1

- Food Scraps/Paper/General Waste – Office/Admin Building
- Oily Rags Drum – Shed 1
- Jet A1 Empty Tanks to be washed (with approx. 100lt in tank foot) – Container Laydown Area
- General Waste – Skips Bins
- Food Scraps/Paper/General Waste – Lunchroom
- Oily Rags Drum – Tank Wash Bay
- General Waste – Skips Bins
- Liquid Waste – Bunded IBC's (Wash water collected from inside tanks)
- Tank Wash Water – Tank 1(Collected during Operating Hours)

4.10 Waste Minimisation and Avoidance

OEG's preference is to avoid and re-use wherever possible. OEG has implemented a waste minimisation program by:

- Waste monitoring and tracking to enable OEG to account for trends in waste generation and set targets towards reduction where possible.
- Incorporating information on waste classification and disposal into personnel training and communication material.
- Provision and clear identification of separate waste stream disposal bins and/or locations.
- Discussion opportunities for waste minimisation during staff and contractor meetings.

4.11 Waste Receipt and Handling on Site

All collected waste is signed for and reported by the licensed waste contractor. Volumes, waste types etc are reported monthly by the Finance Manager.

4.12 Waste Tracking

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Waste generated by the supply base is weighed by the OEG waste disposal contractor when collected from the site.

OEG is advised of the:

- amount and classification of waste transported;
- name and license number of transporter;
- date transported; name and location of the receiving waste facility;
- waste Transfer Certificate (when appropriate); and
- processing (whether disposed or recycled).

On a monthly basis, the waste disposal contractor will submit the waste data to OEG who records it as part of the site Waste Register.

The QHSE department analyses and graphs the results showing trends over time. This graph will be reviewed each regularly by the QHSE department and will be distributed in accordance with the below diagram:

OEG will undertake an annual review of the ongoing monitoring and discuss justification in the annual Management Review

6.0 Discharge Points

6.1 Discharge to Air

Potential discharges to air from operations at the facility would be from the storage of Methanol and Ethanol in ISO tanks on the site with a total storage volume of 600,000lt (475, 000T).

6.2 Discharge to Land

There is no known discharge to land access points at the facility.

6.3 Discharge to Water

In the event one of the bunds fail on site then the contents would discharge to water via the municipal drain that connect to Darwin Harbour.

7.0 Emission Sources

Emissions from fuel or organic liquid storage will generally be fugitive emissions to air unless there is a spill, in which case there may also be emissions to land and/or water.

7.1 Emissions to Air

Air emissions are categorised as fugitive emissions.

7.1.1 Fugitive Emissions

Emissions from storage tanks are categorised as working and standing losses.

Working losses are the combined loss from filling and emptying a tank. As the liquid level increases, the pressure inside the tank increases and vapours are expelled from the tank. A loss during emptying occurs when air drawn into the tank becomes saturated with organic vapour and expands, thus exceeding the capacity of the vapour space.

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Standing losses occur through the expulsion of vapour from a tank due to the vapour expansion and contraction as a result of changes in temperature and barometric pressure. This loss occurs without any change in the liquid level in the tank.

7.2 Emissions to Water

Emissions of fuel and organic liquid from spills or leaks discharged to surface water (Darwin harbour) via Municipal Drain (storm water).

7.3 Emission to Land

Emissions of substances to land from spills or leaks.

8.0 Hazardous Substances

8.1 Hazardous Substance Identification

All chemicals brought onto the Darwin Supply base will be accompanied by a MSDS. All tanks washed onsite will arrive with a MSDS of the chemical last used in the tank.

8.2 Hazardous Substance Risk Assessment

A Hazardous Substance Risk Assessment will be completed for all chemicals identified as hazardous.

8.3 Hazardous Substances Packing

All hazardous substances must be correctly packed in accordance with Part 2 of schedule 9.

8.4 Hazardous Substance Labelling

All hazardous substances transferred or decanted from its original container must be correctly labelled. Label elements must comply with Part 3 of Schedule 9.

8.5 Hazard Substance SDS

All hazardous substances that are blended and repackaged for distribution to clients must be accompanied by a current Safety Data Sheet (SDS).

8.6 Hazardous Substance Pipework

All hazardous substances within pipe work must be identified by a label or sign.

8.7 Hazardous Waste Products

All hazardous waste products must be identified and correctly classified and labelled with the product name, Australian address and business telephone number of either the manufacturer or importer and a hazard pictogram and hazard statement that are consistent with the correct classification of the chemical.

8.8 Hazardous Substance Manifest

| ITEM | SHIPPING NAME | HAZARD CLASS | HAZARD CATEGORY | MANIFEST QUANTITY | ADG CODE | UN NUMBER | LOCATION |
|------|---------------|--------------|-----------------|-------------------|----------|-----------|----------|
|------|---------------|--------------|-----------------|-------------------|----------|-----------|----------|

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| | | | | | | | |
|----|---------------------|-------------|------------|--------|-----------|--------|---------------------|
| 1 | Diesel | Flammable | Category 2 | 110000 | Class 9 | UN3082 | Yard 1 - ISO Tank 3 |
| 2 | Ethanol | Flammable | Category 2 | 150000 | Class 3 | UN1170 | Yard 1 - ISO Tank 5 |
| 3 | Methanol | Flammable | Category 2 | 150000 | Class 3 | UN1230 | Yard 1 - ISO Tank 6 |
| 4 | Methanol | Flammable | Category 2 | 150000 | Class 3 | UN1230 | Yard 1 - ISO Tank 7 |
| 5 | Methanol | Flammable | Category 2 | 150000 | Class 3 | UN1230 | Yard 1 - ISO Tank 8 |
| 6 | Parrafin Inhibitor | Flammable | Category 3 | 3000 | Class 3 | UN2924 | Yard 1 - Shed 1 |
| 7 | PS-2577 | Flammable | Category 4 | 6000 | Class 9 | UN3082 | Yard 1 - Shed 1 |
| 8 | Solvent 150 | Env. Hazard | N/A | 6000 | Class 9 | UN3082 | Yard 1 - Shed 1 |
| 9 | THPS 75% | Toxic | N/A | 3000 | Class 6.1 | UN2810 | Yard 1 - Shed 1 |
| 10 | Corrosion Inhibitor | Flammable | Category 3 | 3000 | Class 3 | UN1950 | Yard 1 - Shed 1 |
| 11 | Aviation Fuel | Flammable | Category 2 | 5000 | Class 3 | UN1863 | Yard 1 - Shed 1 |

8.9 Placarding

Outer warning placards are to be prominently displayed due to exceeding the placard quantities in Schedule 11 unless the hazardous substance has been repackaged for transport in an IBC/Container and has a placard that meets the ADG Code.

9.0 Monitoring

9.1 Inspections

Regular inspection of waste storage facilities is undertaken as part of routine environmental and maintenance inspections, including:

- office bin areas;
- skip bins;
- waste oil storage areas;
- storm water management devices;
- silt arrestors and oil interceptors; and
- all materials removed from watercourses.

9.2 Monitoring and Reporting

The following table shows typical monitoring requirements and frequencies:

| Requirement | Method | Frequency |
|---------------------------------|-------------------|---------------------|
| Waste Segregation | Site Inspection | Monthly |
| Spill Kits | Site Inspection | Monthly |
| Fire Extinguishers/Hoses/Alarms | Site Inspection | Monthly |
| Water Usage | Reporting | Annual (Mgt Review) |
| Energy Usage | Surveillance | Annual (Mgt Review) |
| Hazardous Substances | Chemical Register | Monthly |
| Oil/Water Separator | Site Inspection | Monthly |
| Waste Reporting | Reporting | Monthly |
| Water Monitoring | Reporting | Monthly |

9.3 Evaluation of Compliance

Numerous inspections types are used to evaluate Environment Management compliance:

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- Compliance visits by regulatory parties and customers;
- Site environment inspection checklists;
- Waste management equipment maintenance checklists;
- Compliance Evaluation Inspection (CEI) is an on-site evaluation of hazardous waste handler's compliance to regulations and permit standards.

9.4 Non-Conformity, Corrective and Preventative Action

All identified Non-Conformity is recorded using a Non-Conformance Report Form with all continuous improvement recommendations arising from corrective and preventative actions documented in the Non-Conformance Report as per Non-Conformity, Corrective and Preventative Action Procedure.

Examples of Environment Non-Conformity are as follows:

- NCR's identified from EMS and Management Review Audits;
- Incorrect information of environmental attributes of Product;
- Non-fulfilment of Objectives and Targets;
- Training requirements identified;
- Results of Inspection and Calibration Audits; and
- Operational Control Failure (maintenance, design, manufacturer).

9.5 Control of Records

OEG retains all records for traceability, including:

- Waste receipts and invoices
- Water/Power/Utility Bills
- Fuel Receipts
- Incoming/Outgoing Inspection Checklists
- Site Inspection Reports

These documents will be retained for traceability and will be included in the Management Review.

They will be administered by the National QHSE Manager will be uploaded into OEG internal document management system.

Records relating to waste disposal are maintained for a period of 4 years.

9.6 Reporting

Relevant information relating to waste management will be reported to the Senior Management Team and will include:

- Monthly waste reporting
- Monthly reporting of environment incidents
- Annual Environment Reporting as part of the Management Review
- Annual Environmental Protection Licence documents

9.7 Internal Audit

The annual audit and review of the SEM which emphasises on utilising Environment Risk Assessment as the driver of the review will help OEG achieve the following:

- Fulfilment of OEG's commitment to continuous improvement as noted in the Environmental Policy Statement;

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- Rectification of operational or system deficiencies;
- Transparent and straightforward auditing of OEG’s systems and processes; and
- Ensuring changes to operations directed by management upon review of activities, incidents, monitoring data and the Annual Environmental Management Report can be reflected in this plan.

All internal audits will be recorded in the Audit and Inspection schedule as documented in the company Quality Management Manual.

10.0 Management Review

Annual management reviews will take place as documented in the Management Review Procedure.

11.0 Documented Information

| Form No: | Title: | Location: |
|-------------------|---|------------|
| OEGAU-MAN-001 | Health, Safety, Security and Environment Manual | Electronic |
| OEGAU-MAN-002 | Quality Manual | Electronic |
| OEGAU-MAN-003 | Quality Inspection and Test Manual | Electronic |
| OEGAU-E-POL-001 | Environment Policy | Electronic |
| OEGAU-S-FO-034 | Chemical Handling and Hazardous Substance Awareness Training Presentation | Electronic |
| OEGAU-S-PROCD-014 | Chemical Management Procedure | Electronic |
| OEGAU-E-PROCD-001 | Spill Management Procedure | Electronic |
| OEGAU-E-PROCD-002 | Waste Management Procedure | Electronic |
| OEGAU-E-PROCD-003 | Environmental Aspects Procedure | Electronic |
| OEGAU-S-PROCD-022 | Emergency Preparedness & Response Procedure_Darwin | Electronic |
| OEGAU-E-FO-001 | Aspects and Impacts Register | Electronic |
| OEGAU-E-FO-002 | Legal Register | Electronic |
| OEGAU-E-FO-003 | Aspects and Impacts Assessment Form | Electronic |
| OEGAU-E-FO-004 | Waste Register | Electronic |
| OEGAU-E-FO-005 | Spill Management Presentation | Electronic |
| OEGAU-E-FO-007 | Environment Audit Form | Electronic |
| OEGAU-E-FO-008 | TEG Register | Electronic |
| OEGAU-E-FO-009 | Methanol Register | Electronic |
| OEGAU-E-FO-010 | Ethanol Register | Electronic |
| OEGAU-E-FO-011 | Raw Chemical Register (NALCO) | Electronic |
| OEGAU-S-FO-023 | SDS Register | Electronic |
| OEGAU-S-FO-031 | Hazardous Substance Risk Assessment | Electronic |
| OEGAU-Q-PROCD-013 | Non-Conformity, Corrective and Preventative Action Procedure | Electronic |
| OEGAU-Q-FO-063 | NCR Register | Electronic |
| OEGAU-Q-FO-002 | Non-Conformance Report Form | Electronic |
| OEGAU-Q-PROCD-014 | Management Review Procedure | Electronic |

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Appendix A - Schedule 2: Listed Wastes at Darwin Supply Base

- Acidic solutions or acids in solid form
- Containers that are contaminated with residues of a listed waste
- Sewage sludge and residues including night soil and septic tank sludge
- Waste mixtures, or waste emulsions, of oil and water or hydrocarbon and water

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Appendix B – Measuring and Monitoring Objectives

| | |
|----|--|
| 1 | Ensuring work is performed in accordance with this Site Environment Manual. The Environmental Management System and statutory requirements. |
| 2 | Pollution prevention and environmental impact reduction |
| 3 | Mitigate potential environmental risks. Impacts are identified, and provisions are made for them prevention and management |
| 4 | Ensuring Personnel are aware of and able to achieve their environmental targets through appropriate training and awareness programs. |
| 5 | Maintain and improve SEP and procedures in order to meet and demonstrate the environmental objectives are met |
| 6 | Compliance with environmental legislation, guidelines and policies |
| 7 | Keep the Facility/Base clean and free from any potential environmental hazards |
| 8 | Mitigating potential hazardous risk |
| 9 | Achievement of best practice environmental management |
| 10 | Ensure environmental controls are implemented and continuous improvement processes are in place |
| 11 | Ensure the water quality in the region is maintained and that surface water released to the municipal drain that feeds into Darwin Harbour is not contaminated with hazardous substances |

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| OBJECTIVE 1: | Ensuring work is performed in accordance with this Site Environment Manual. The Environmental Management System and statutory requirements. | | | | | | |
|---|---|---|--|--|--|--|------------------------------|
| Activity * | Performance Measure | Total projected outputs* | How will progress be measured* | When will progress be measured* | What tools/resources are required to measure progress* | Who is responsible for measuring progress* | Activity completion date(s)* |
| All EMS non-compliances reported and recorded. | Close out of actions from incident investigations, inspections, observations, audits and inspections within agreed timeframes. | 100% reporting of incidents, planned site inspections and audits | Actual vs. Scheduled | Within CA_PA register at Monthly QHSE/Operations Meeting | OEGAU-Q-FO-063 NCR Register OEGAU-S-FO-022 Accident and Incident Register | National QHSE Manager | Ongoing |
| What would success look like if you achieved this objective? Zero non-compliances reported. | | | | | | | |
| OBJECTIVE 2: | Pollution prevention and environmental impact reduction | | | | | | |
| Activity * | Performance Measure | Total projected outputs* | How will progress be measured* | When will progress be measured* | What tools/resources are required to measure progress* | Who is responsible for measuring progress* | Activity completion date(s)* |
| Immediate reporting of Environment incidents to EPA | Each Spill released to the environment reported immediately to EPA | 100% of all spills reported and recorded in Incident Register | Reduction in spills recorded | Annual Mgt Review Meeting | OEGAU-S-FO-022 Accident and Incident Register | National QHSE Manager | Ongoing |
| Chemical Safety Data Sheets | Completion of Hazardous Substance Risk Assessments | 100% of all chemicals brought to site to have SDS assessed for risk | Hazardous Substance Risk Assessments reviewed every 2 years. | Annual Mgt Review Meeting | OEGAU-S-FO-023 MSDS Register (MASTER) | National QHSE Manager | Ongoing |

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| OBJECTIVE 1: | Ensuring work is performed in accordance with this Site Environment Manual. The Environmental Management System and statutory requirements. | | | | | | |
|---|---|--------------------------|--------------------------------|---------------------------------|---|--|------------------------------|
| Activity * | Performance Measure | Total projected outputs* | How will progress be measured* | When will progress be measured* | What tools/ resources are required to measure progress* | Who is responsible for measuring progress* | Activity completion date(s)* |
| Internal Environment Audits | 100 % of planned Environment Audits completed | Annual Environment Audit | Actual vs Scheduled | Annual Mgt Review Meeting | OEGAU-Q-FO-072 Audit and Inspection Schedule | National QHSE Manager | Ongoing |
| <p>What would success look like if you achieved this objective? Increased staff awareness demonstrated by an increase in Preventative Actions and a decrease in Corrective Actions.</p> | | | | | | | |

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| OBJECTIVE 3: | Mitigate potential environmental risks. Impacts are identified, and provisions are made for their prevention and management | | | | | | |
|---|---|--|---|--|--|---|-------------------------------------|
| Activity * | Performance Measure | Total projected outputs* | How will progress be measured* | When will progress be measured* | What tools/ resources are required to measure progress* | Who is responsible for measuring progress* | Activity completion date(s)* |
| Site Inspections | Each completed site inspection checklists | Weekly Site Inspections | Planned vs Actual | Monthly QHSE Report | OEGAU-Q-FO-072 Audit and Inspection Schedule | National QHSE Manager | Ongoing |
| Daily Job Hazard Analysis (JHA) | Each additional Risk recorded within PTW/JHA | Completion of daily JHA/PTW | New risks identified and updated in Risk Register | Monthly QHSE Report | OEGAU-E-FO-006 Risk Register | National QHSE Manager | Ongoing |
| Increase in Preventative Actions | Every Preventative Actions recorded | Each Preventative Action (PA) recorded | Increase in PA recorded in CA_PA Register | Annual Mgt Review | OEGAU-Q-FO-077 Management Review Report | National QHSE Manager | Ongoing |
| Environ. Aspects Assessments | Each Env. Aspect Assessment Form | Env. Aspect assessed for all processes | Env. Aspects reviewed for effectiveness | Annual Mgt Review | OEGAU-E-FO-001 Aspects and Impacts Register | National QHSE Manager | Ongoing |
| <p>What would success look like if you achieved this objective?</p> <ul style="list-style-type: none"> • Annual reduction in non-compliances raised and recorded from Site Inspections in Incident Register • Non-hazardous chemicals identified and procured once identified within in Hazardous Substance Risk Assessments • Controls reviewed for effectiveness in the Environment Risk Register. • Increase in Preventative Actions recorded in CA_PA Register at Annual Mgt Review. | | | | | | | |

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| OBJECTIVE 3: | Mitigate potential environmental risks. Impacts are identified, and provisions are made for their prevention and management | | | | | | |
|---|--|-------------------------------|----------------------------------|---------------------------------|---|--|------------------------------|
| Activity * | Performance Measure | Total projected outputs* | How will progress be measured* | When will progress be measured* | What tools/ resources are required to measure progress* | Who is responsible for measuring progress* | Activity completion date(s)* |
| OBJECTIVE 4: | Ensuring Personnel are aware of and able to achieve their environmental targets through appropriate training and awareness programs. | | | | | | |
| Activity * | Performance Measure | Total projected outputs* | How will progress be measured* | When will progress be measured* | What tools/ resources are required to measure progress* | Who is responsible for measuring progress* | Activity completion date(s)* |
| Inductions for all new employees | Each new employee | Each induction | Number of new employees inducted | Annual Mgt Review | OEGAU-Q-FO-077 Management Review Report | National QHSE Manager | Ongoing |
| Refresher training | Per training session | Training session per employee | Actual vs Planned | Annual Mgt Review | OEGAU-Q-FO-071 Training Matrix | National QHSE Manager | Ongoing |
| Environmental awareness topics delivered to personnel in toolbox sessions | Per Env. Toolbox Talk | 10% of Toolbox Talks | Actual vs Planned | Annual Mgt Review | OEGAU-Q-FO-077 Management Review Report | National QHSE Manager | Ongoing |
| What would success look like if you achieved this objective? | | | | | | | |
| All employees familiar with Environment Objectives and Targets the company want to achieve by an increase in training and toolbox meeting attendance. | | | | | | | |

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| OBJECTIVE 5: | Maintain and improve SEP and procedures in order to meet and demonstrate the environmental objectives are met. | | | | | | |
|--|--|--|---|---------------------------------|---|--|--------------------------------|
| Activity * | Performance Measure | Total projected outputs* | How will progress be measured* | When will progress be measured* | What tools/ resources are required to measure progress* | Who is responsible for measuring progress* | Activity completion date(s)* |
| Annual Review of SEP | Each completed review | Per document review | Actual vs Planned | Annual Mgt Meeting | OEGAU-Q-FO-077 Management Review Report | National QHSE Manager | Ongoing |
| What would success look like if you achieved this objective? Additional revisions signed off once reviewed annually. | | | | | | | |
| OBJECTIVE 6: | Compliance with environmental legislation, guidelines and policies. | | | | | | |
| Activity * | Performance Measure | Total projected outputs* | How will progress be measured* | When will progress be measured* | What tools/ resources are required to measure progress* | Who is responsible for measuring progress* | Activity completion date(s)* |
| Legal Register – compliance with applicable environmental legislative requirements | Each completed review | 100 % | Actual vs Planned | Annual Mgt Meeting | OEGAU-E-FO-002 Legal Register | National QHSE Manager | Ongoing |
| Non-compliance identified during performance monitoring | Each Non-Conformance raised | CAR >90% close out within specified time frame | Actions closed out in required timeframe | Annual Mgt Meeting | OEGAU-Q-FO-114 CA_PA_Register | National QHSE Manager | Ongoing |
| Compliance with Waste EPL | Monthly Environment Monitoring by CDM Smith reported at QHSE Meeting | 100% | NCR Raised for each increase in baseline levels | Monthly QHSE Meeting | SQPM Plan developed by CDM Smith | National QHSE Manager | 12 Months commencing Sept 2018 |
| Ensure the water quality in the | | | | | | | |

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| OBJECTIVE 5: | Maintain and improve SEP and procedures in order to meet and demonstrate the environmental objectives are met. | | | | | | |
|---|--|--------------------------|--|---------------------------------|--|--|------------------------------|
| Activity * | Performance Measure | Total projected outputs* | How will progress be measured* | When will progress be measured* | What tools/resources are required to measure progress* | Who is responsible for measuring progress* | Activity completion date(s)* |
| region is maintained and that surface water released to the municipal drain that feeds into Darwin Harbour is not contaminated with hazardous substances | Monthly Waste Reporting (internal) and Annual Waste Reporting (external/EPA) | 100% | Each waste report statistic entered into QHSE Report | Monthly QHSE Report | | National QHSE Manager | Ongoing |
| | Review item in Annual Mgt Meeting | 100% | Agenda item reviewed at Annual Mgt Meeting | Annual Mgt Meeting | OEGAU-Q-FO-077 Management Review Report | National QHSE Manager | Ongoing |
| What would success look like if you achieved this objective? | | | | | | | |
| <ul style="list-style-type: none"> • Provision of a Waste EPL by the EPA. • Toolbox Meeting for all legislative changes identified • Review of all legislative changes at the Annual Mgt Meeting | | | | | | | |
| OBJECTIVE 7: | Keep the Facility/Base clean and free from any potential environmental hazards | | | | | | |
| Activity * | Performance Measure | Total projected outputs* | How will progress be measured* | When will progress be measured* | What tools/resources are required to measure progress* | Who is responsible for measuring progress* | Activity completion date(s)* |

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| OBJECTIVE 5: | Maintain and improve SEP and procedures in order to meet and demonstrate the environmental objectives are met. | | | | | | |
|--|--|----------------------------|--------------------------------|---------------------------------|--|--|------------------------------|
| Activity * | Performance Measure | Total projected outputs* | How will progress be measured* | When will progress be measured* | What tools/ resources are required to measure progress* | Who is responsible for measuring progress* | Activity completion date(s)* |
| Site inspections as documented in Environment Plan | Each inspection completed | 100% | Actual vs Planned | Monthly QSHE Meeting | OEGAU-S-FO-005 Site Inspection Checklist OEGAU-FO-073 Monthly QHSE Report | National QHSE Manager | Ongoing |
| What would success look like if you achieved this objective? 100% of planned site inspections completed with a reduction in corrective actions raised. | | | | | | | |
| OBJECTIVE 8: | Mitigating potential hazardous risk | | | | | | |
| Activity * | Performance Measure | Total projected outputs* | How will progress be measured* | When will progress be measured* | What tools/ resources are required to measure progress* | Who is responsible for measuring progress* | Activity completion date(s)* |
| Daily risk assessments (JHA) to identify new risks | Daily JHA completed | Each work day | Actual vs Planned | Monthly QHSE Meeting | OEGAU-E-FO-001 Aspects & Impacts Register | National QHSE Manager | Ongoing |
| DG & Hazardous Goods Training | Each Manager/Supervisor Trained | Every Manager/Supervisor | Actual vs Planned | Monthly QHSE Meeting | OEGAU-FO-073 Monthly QHSE Report | National QHSE Manager | Ongoing |
| Incident Reporting | Each incident report | 100% of incidents reported | | Monthly QHSE Meeting | OEGAU-Q-FO-071 Training Matrix | National QHSE Manager | Ongoing |

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|---|--|---------------------------------|---------------------------------------|--|--|---|-------------------------------------|
| OBJECTIVE 5: | Maintain and improve SEP and procedures in order to meet and demonstrate the environmental objectives are met. | | | | | | |
| | | Total | | When will | What tools/ | Who is | Activity |
| OBJECTIVE 9: | Achievement of best practice environmental management | | | | | | |
| Activity * | Performance Measure | Total projected outputs* | How will progress be measured* | When will progress be measured* | What tools/ resources are required to measure progress* | Who is responsible for measuring progress* | Activity completion date(s)* |
| Adherence to this Site Environment Management Plan | Audit Result Inspection Results | 100% | NCR's raised | Monthly QHSE Meeting | OEGAU-FO-073 Monthly QHSE Report | National QHSE Manager | Ongoing |
| What would success look like if you achieved this objective? | | | | | | | |
| Increase in Preventative Actions and reduction in Corrective Actions raised for non-compliance. | | | | | | | |
| OBJECTIVE 10: | Ensure environmental controls are implemented and continuous improvement processes are in place. | | | | | | |
| Activity * | Performance Measure | Total projected outputs* | How will progress be measured* | When will progress be measured* | What tools/ resources are required to measure progress* | Who is responsible for measuring progress* | Activity completion date(s)* |
| Environment audits of Supply Base | Audit Schedule: developed and in operation | 100% | Inspections and audits completed | Annual Audits | OEGAU-E-FO-007 Environment Audit Report | National QHSE Manager | Ongoing |
| Corrective actions raised for non-compliance | Corrective action raised for each non-compliance | 100% | Actual vs Scheduled | Monthly QHSE Meeting | OEGAU-Q-FO-114 CA_PA_Register | National QHSE Manager | Ongoing |
| What would success look like if you achieved this objective? | | | | | | | |
| Corrective actions reported and reviewed for effectiveness. | | | | | | | |

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Appendix C – Location Plan

